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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/554,002	08/18/2006	Mordekhai Velger	BKE0007US	5153
23413	7590	03/19/2010	EXAMINER	
CANTOR COLBURN, LLP			TRA, TUYEN Q	
20 Church Street			ART UNIT	PAPER NUMBER
22nd Floor			2873	
Hartford, CT 06103				
NOTIFICATION DATE		DELIVERY MODE		
03/19/2010		ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

[usptopatentmail@cantorcolburn.com](mailto:usptopatentmail@cantorcolburn.com)

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/554,002	VELGER ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	TUYEN Q. TRA	2873	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 27 August 2009.  
 2a) This action is **FINAL**.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-18 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1-18 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on 21 October 2005 is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                 | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                        | Paper No(s)/Mail Date. _____ .                                    |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____. | 5) <input type="checkbox"/> Notice of Informal Patent Application |
|   | 6) <input type="checkbox"/> Other: _____ .                        |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 17 and 18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. These claims fails to disclose further limitations and/or clear recites distinctly the claiming subject mater. Examiner suggests that cancel those claims.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 4-14, 17 and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Elsner et al.(DE 19728598).

With respect to claim 1, Elsner discloses a plurality of masses (elements 8, 7 and 9 of Figure 1), at least one of said masses comprising a light processing module (element 7 of Figure 1), at least one force producing element (element 8 and 9 of Figure 1) coupled to at least one of said masses, said at least force producing element applying at least one force to at least one said masses; and a plurality of elastic elements (element 5, 6, 20 and 21 of Figure 1), said elastic elements coupling said masses (elements 8, 9 and 7 of Figure 1) together, said elastic elements (element 5 and 6 of Figure 1) coupling at least one of said masses to at least one support (3 and 4

of Figure 1) wherein the mass values of said masses, the force value of said at least one force and the stiffness coefficients of said elastic elements, are selected such that said light processing module oscillates according to a predetermined waveform.

With respect to claim 2, Elsner further discloses wherein said geometric waveform is non-sinusoidal (col. 3, lines 5-20).

With respect to claims 4 and 5, Elsner further discloses wherein triangular waveform is not symmetric; the light processing module (7) reflects light (because element 7 is a mirror).

With respect to claim 6, Elsner further discloses wherein the light processing module (7) oscillates in an oscillatory motion spatially.

With respect to claim 7, Elsner further discloses wherein the force producing elements (3, 4) is electrostatic element (electrodes).

With respect to claim 8, Elsner further discloses wherein the one force producing element (3, 4) is located the support.

With respect to claim 9, Elsner further discloses wherein each of the masses (8, 9), the force producing element (3, 4), and the elastic elements (20, 21) are incorporated with a micro-electromechanical system (1 of Figure 1).

With respect to claim 10, Elsner further discloses wherein the light processing module (7) is located between respective two of said masses (8 and 9 of Figure 1).

With respect to claim 11, Elsner further discloses wherein a first group of the mass (8) and a second group of the mass (9) are symmetrically located at two sides of the light processing module (7).

With respect to claim 12, Elsner further discloses wherein a selected mass (8) of the first group and a respective mass (9) of said second group, are located at opposite sides of said light processing module (7), said selected mass (8) and respective mass (9) having substantially the same geometric and physical characteristics.

With respect to claim 13, Elsner further discloses wherein the mass (8, 9) and the elastic elements (20, 21) are located between two of the respective the one support.

With respect to claim 14, Elsner further discloses wherein the densities of said masses (8, 9) and said elastic elements (20, 21) are substantially the same.

With respect to claims 17 and 18, Elsner further discloses wherein the geometric-waveform oscillator substantially as illustrated in any of the drawings.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Elsner et al.(DE 19728598), as applied to claim 1 above, in view of LeMay (US 3,727,183).

Elsner teaches a waveform oscillator as disclose as described above. However, Elsner does not expressly disclose wherein the triangular waveform is symmetric. LeMay teaches an oscillator (30) with symmetric saw-tooth waveform (col. 5, lines 60-65). It would have been obvious to someone having ordinary skill in the art at the time invention was made to incorporate

the teaching of LeMay into the device of Elsner invention for purpose of inputting symmetrical waveform.

Claims 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Elsner et al.(DE 19728598), as applied to claim 1 above, in view of Jin (US 6,704,475).

Elsner discloses a waveform oscillator as described above. Elsner, however, does not expressly disclose one damping element coupled with two anchoring points; wherein one of said two anchoring points is located on one selected from the list consisting of: said at least one masses; said at least one force producing element; and at least one of said elastic elements, and wherein another one of said two anchoring points is located on one selected from the list consisting of: said at least one masses; said at least one elastic elements; and said respective support. Jin discloses one damping element (element 150 of Figure 1) coupled with two anchoring points; wherein one anchoring point is located on mass/elastic (element 120 of Fig. 1) and the other anchoring point located on support (element 130 of Fig. 1). It would have been obvious to someone having ordinary skill in the art at the time of the invention to incorporate the teachings of Jin into the device of Elsner invention for purpose of damping.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TUYEN Q. TRA whose telephone number is (571)272-2343. The examiner can normally be reached on 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky L. Mack can be reached on 571-272-2333. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Tuyen Q Tra/  
Examiner, Art Unit 2873

/Ricky L. Mack/  
Supervisory Patent Examiner, Art Unit 2873